DISASTER TWINS

FIRE AND FLOOD

SAN BERNARDINO N.F.
1954 - 1955

SD
425
.D63
1955

U.S. Forest Service
Pacific Southwest Library and Information Center
1323 Club Drive
Vallejo, CA 94592-1110

LIBRARY
RECEIVED
FEB 1 0 1955
U.S. DEPARTMENT OF AGRICULTURE
PORTLAND 8 STATION

FOREST SERVICE
U S
DEPARTMENT OF AGRICULTURE

U.S. DEPT. OF AGRICULTURE
FOREST SERVICE
CALIFORNIA REGION

AGRICULTURE—FOREST SERVICE—SAN FRANCISCO

Property of
National FS Library
USDA Forest Service
240 W Prospect Rd
Fort Collins CO 80526

Pacific Northwest Exp. Station

FOREST SERVICE SAN FRANCISCO 11, CALIFORNIA

~~[illegible]~~ (later)
~~Durno~~
~~Mark's~~
~~[illegible]~~
~~Forest~~

February 1, 1955

TO : REGIONAL FORESTERS, REGIONS 1 - 10
STATION DIRECTORS

FROM : REGIONAL FORESTER, R-5, By Library

FOREST SERVICE
PACIFIC NORTHWEST EXPERIMENT STATION
PORTLAND, OREGON
FEB 4 1955
RECEIVED

SUBJECT: F-SUPERVISION-Publications

At the request of the Washington Office, Region 5 prepared a number of charts concerning fire and flood matters. Based upon these charts, a letter-size brochure has been prepared entitled "Disaster Twins--Fire and Flood".

We are attaching a copy of the "Disaster Twins" publication. We have a few additional copies if you have need for them.

Ronald R Ball

cc: R-5 divisions

Attachment

PANORAMA POINT FIRE

SAN BERNARDINO NATIONAL FOREST

SEPT. 27, 1954

LAKE GREGORY & COMMUNITY OF CRESTLINE CALIF.

FLAMES 100 FT. HIGH

3 HOURS AFTER ORIGIN - 500 ACRES BURNED
FINAL AREA 5079 ACRES

MILD SANTA ANA WEATHER - RAPID DOWN HILL SPREAD

CHART 1-55

Scene below depicts proximity of fire to developed communities. Human lives are in danger--a shift in wind or less effective firefighting could easily have resulted in a true holocaust. Note conjested traffic backed up in left foreground.

PANORAMA POINT FIRE

DIRECT THREAT TO LIFE AND PROPERTY

FIRE LESS THAN 400 YDS. FROM ESTIMATED WEEK END POPULATION OF 4000 PEOPLE & VALUABLE PROPERTY

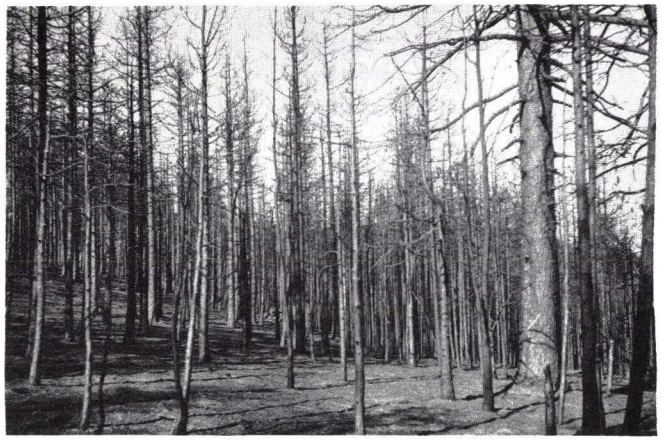
Fire plays no favorites--watershed, timber, works of man, all are rendered worthless when fire is not controlled.

Note intensity of flame in upper right photo in relation to power pole. The young forest in lower left will take many years to replace, the lumber it might have yielded is lost. The home, reduced to ashes, in lower right and those that were saved give an idea of some of the problems of fire control in Southern California.

FIRE

SEPTEMBER 1954
PANORAMA PT. FIRE

A VALUABLE WATERSHED DENUDED



A YOUNG TIMBERSTAND KILLED

A CRESTLINE HOME BURNED

These pictures tell their own story of continued, unremitting loss, expense and damage resulting from FIRE and its sequel--FLOOD

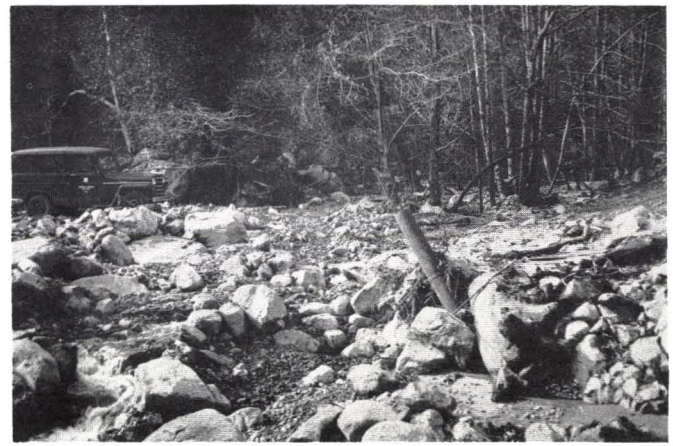
FLOOD

NOVEMBER 1954

FOLLOWING THE PANORAMA PT. FIRE

A VALUABLE VINEYARD GULLIED AND COVERED WITH DEBRIS

A CITY WATER SYSTEM TORN OUT AND WASHED AWAY. ONLY REMNANTS OF 12" PIPELINE REMAIN



A STREAM CHANNEL SCOURED ROADS WASHED OUT

The four scenes below illustrate examples of the impact of the fire-flood sequence on just a small portion of the nation's agriculture. Farmer Knight's land is out of production. The top soil is gone forever. Public funds will be required to store, move, and redistribute the soil and debris which before the fire was a community asset.

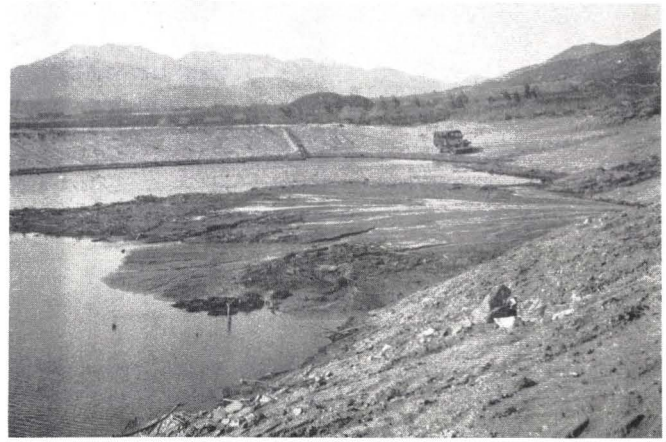
LOST - A FARM

ONE RESULT OF PANORAMA PT. FIRE

BURNED WATERSHED ABOVE KNIGHTS FARM

KNIGHTS PASTURE AFTER FIRST RAIN FOLLOWING FIRE
TOP SOIL GONE - PASTURE GULLIED

FARMER KNIGHT IN DOORYARD
GULLEY CAUSED BY FIRST RUNOFF FROM BURN



TOP SOIL FROM KNIGHTS PASTURE
CAUGHT IN DEBRIS BASIN BELOW

A graphic portrayal of the magnitude of the devastation wrought by wild forest fire in the brief span of less than two years.

The City and Valley of San Bernardino, growing since the Mormon pioneers laid out its streets in 1850, is currently faced with its greatest peril.

Two lessons can be learned from this picture:

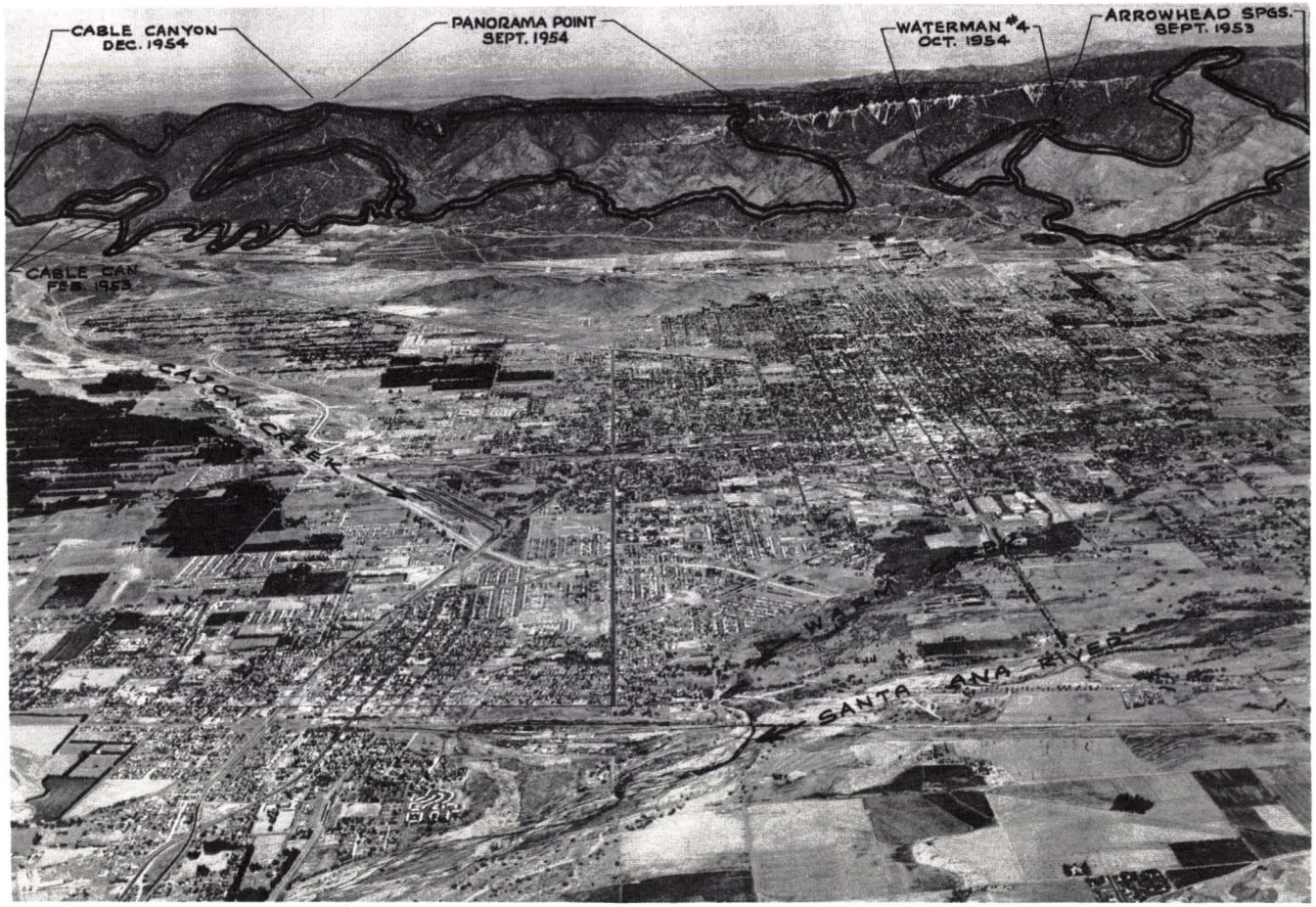
1. Disastrous forest fire can occur in any season of the year--as evidenced by December and February fires.

2. The remaining unburned portions of these watersheds require the best fire protection possible in order to minimize further damage.

2 YRS. OF DISASTER

13,000 ACRES OF WATERSHED BURNED

SAN BERNARDINO NATIONAL FOREST 1953-1954



THREATENED DOWNSTREAM VALUES

POPULATION 80,000 PEOPLE

LOCAL ASSESSED VALUE $68,334,430.00

A portion of the north end of San Bernardino. The City joins the national forest at the foot of the slope. Note extensive home building. The majority of these homes are financed under State or Federal Government insured loans.

Waterspreading grounds are basic to the economy of Southern California. Without them, productive lands revert to desert. Jobs, homes, people, taxes are dependent on adequate watershed protection and management. The roots of a nation are in its soil.

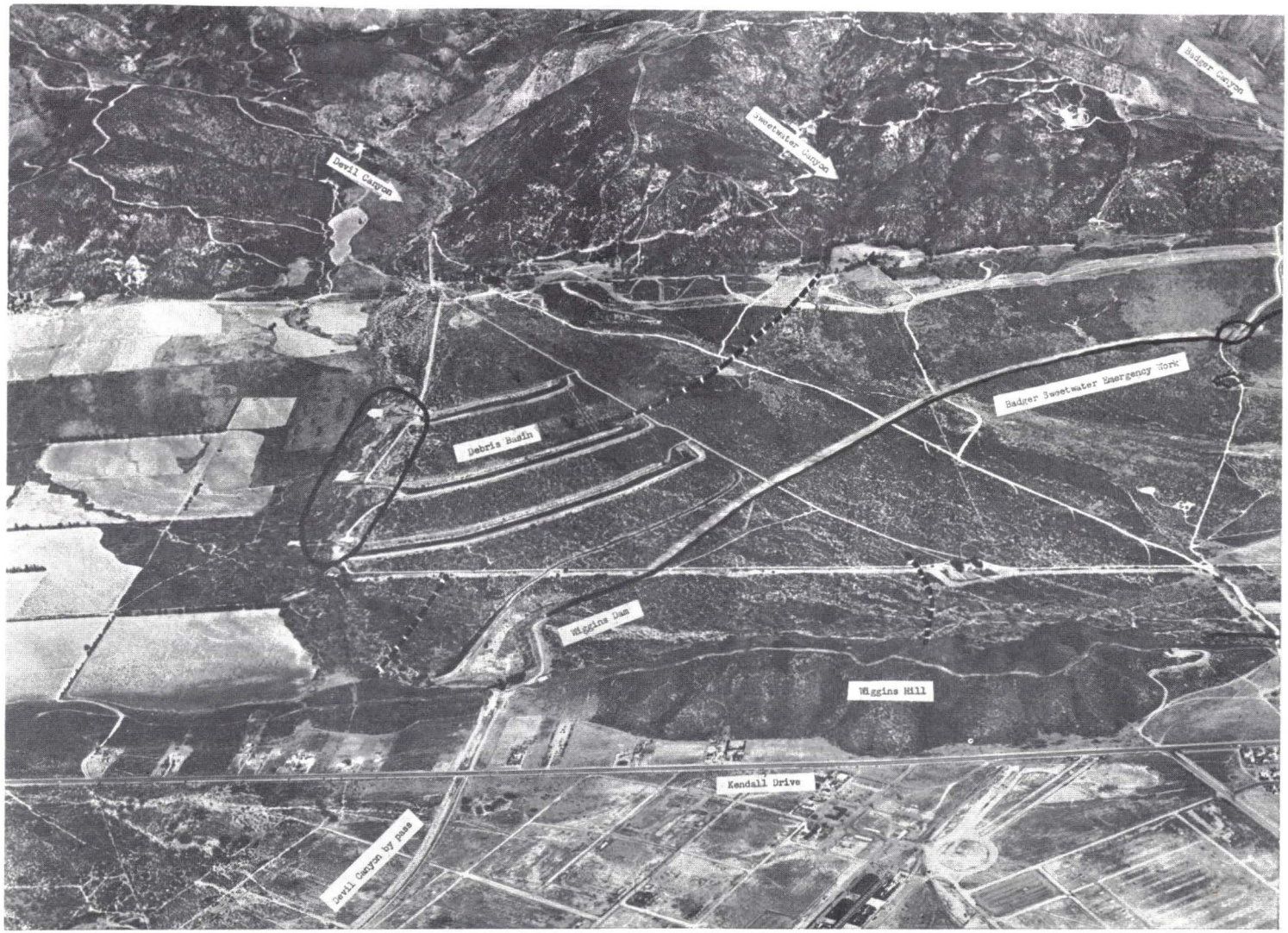
The 700,000 cubic yards of soil and muck shown clogging the spreading grounds below represent one season's runoff only. This process will continue at an above normal rate until the watersheds have recovered--a process that will take some 50 years or more; meanwhile the taxpayers will have to pay at least $1.00 per cubic yard to remove the debris currently--or lose their homes.

BURNED WATERSHEDS AND DOWNSTREAM SPREADING GROUNDS

WATER SPREADING GROUNDS COVERED WITH 700,000 CU. YDS. OF MUCK, SILT AND ASH FROM BURNED WATERSHED - MANY NEW HOMES THREATENED WITH DAMAGE FROM FUTURE FLOODS

BURNED WATERSHEDS NECESSITATE EXTENSIVE FLOOD PREVENTION MEASURES

GENERAL VIEW SAN BERNARDINO AND WATERSHEDS RECENTLY DENUDED BY FIRE. **Chart 8-55.**

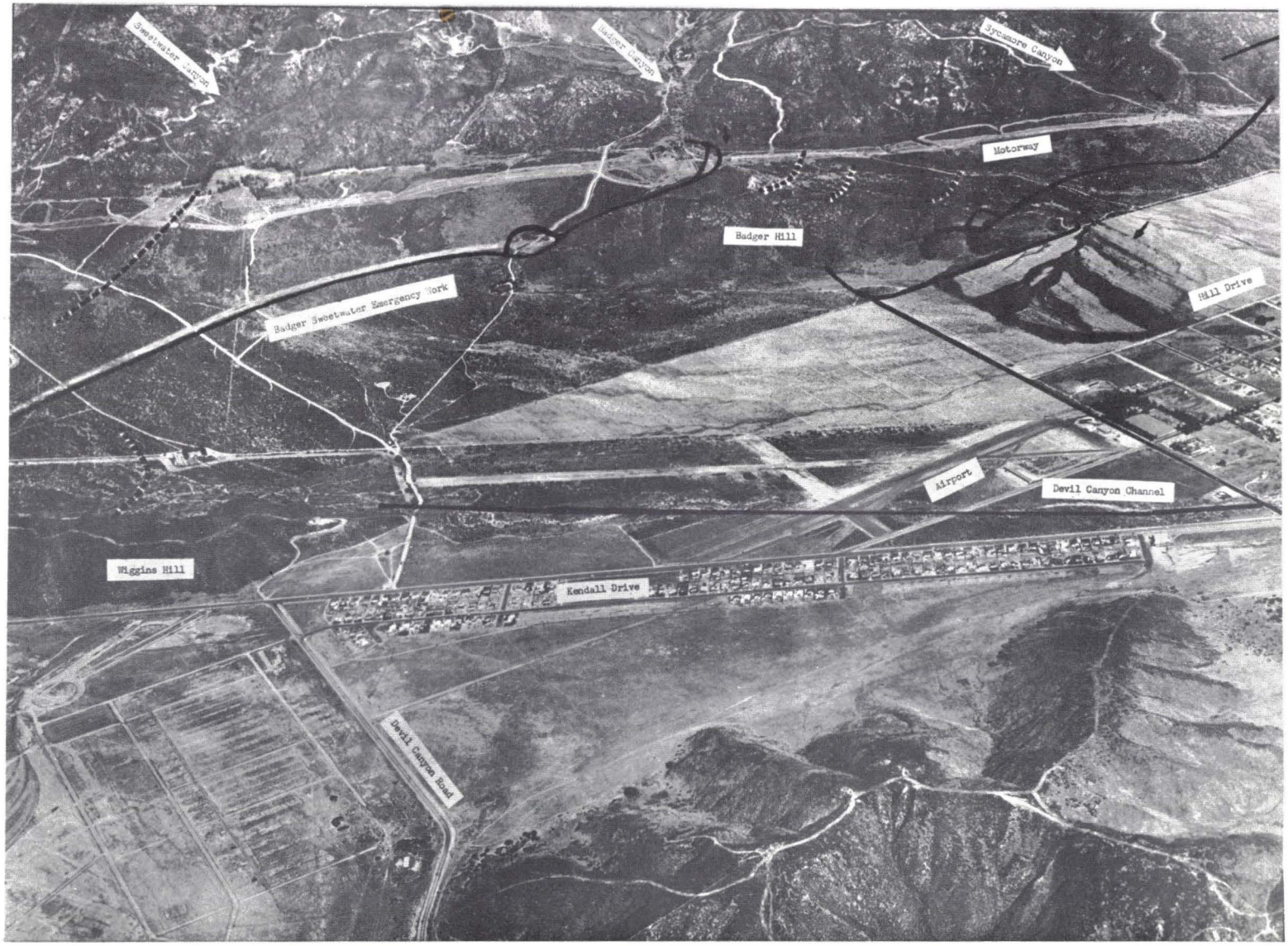


EMERGENCY FLOOD CONTROL WORK REQUIRED BECAUSE OF DENUDED WATERSHED Chart 9-55.

ASHES AND SILT FROM BURNED AREA IN SAN BERNARDINO COUNTY'S DEVILS CANYON FLOOD CONTROL CATCHMENT BASINS FOLLOWING NOVEMBER RAINSTORMS.

———— EMERGENCY FLOOD CONTROL WORK NOW UNDER CONSTRUCTION.

– – – – – – ADDITIONAL EMERGENCY FLOOD CONTROL WORK PROPOSED.



DEBRIS AND ASHES FROM BURNED WATERSHEDS IN BADGER CANYON COVERING VINEYARD. Chart 10-55

EMERGENCY MEASURES REQUIRED.

———— EMERGENCY FLOOD CONTROL WORK NOW UNDER CONSTRUCTION.

– – – – – – ADDITIONAL EMERGENCY FLOOD CONTROL WORK PROPOSED.

DEBRIS FROM BURNED AREAS INVADING SAN BERNARDINO. Chart 11-55

———— EMERGENCY FLOOD CONTROL WORK NOW UNDER CONSTRUCTION.

– – – – – – ADDITIONAL EMERGENCY FLOOD CONTROL WORK PROPOSED.

EMERGENCY WORK REQUIRED TO HALT FURTHER INVASION OF THE CITY OF SAN BERNARDINO BY BURNED AREA DEBRIS. Chart 12-55.

——— EMERGENCY FLOOD CONTROL WORK NOW UNDER CONSTRUCTION.

– – – – – – ADDITIONAL EMERGENCY FLOOD CONTROL WORK PROPOSED.

➡ ARROWS INDICATE TENTACLES OF DESTRUCTION OF ADVANCING DEBRIS.

EMERGENCY WORK REQUIRED BECAUSE PRESENT SPREADING GROUNDS ARE COVERED WITH DEBRIS FROM BURNED WATERSHEDS.

Chart 13-55.

———— EMERGENCY FLOOD CONTROL WORK NOW UNDER CONSTRUCTION.

– – – – – – ADDITIONAL EMERGENCY FLOOD CONTROL WORK PROPOSED.